



FELD3002CIP1_ST25
SEQUENCE LISTING

<110> Feldmann, Richard J.

<120> Modifying the Control of Gene Expression Behavior by the Deletion of Connectrons and by the Design and Addition of Synthetic Connectrons in Prokaryotic, Archea and Eukaryotic Genomes

<130> FELD3002CIP1/ESS

<140> US 10/609,383
<141> 2003-07-01

<150> US 09/866,925
<151> 2001-05-30

<150> US 60/393,558
<151> 2002-07-05

<160> 34

<170> PatentIn version 3.5

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<212> DNA
<213> Saccharomyces cerevisiae complete genome

<220>
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<222> (12572)..(12788)
<223> Chromosome = 1 Strand = positive Connectron Object Number = 36

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ggtggtaatg atgaagtaat ttcctgactt gttgtgttac tggtaacagg tggtaatgaa 120
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<211> 236
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<213> Saccharomyces cerevisiae complete genome

<220>
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<223> Chromosome = 1 Strand = positive Connectron Object Number = 39

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gaagtaattt cctgacttgt tgttgacttg gtaacagggt gtaatgatga agtaatttcc 180
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<210> 3
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 <212> DNA
 <213> Saccharomyces cerevisiae complete genome

<220>
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 <222> (24863)..(25028)
 <223> Chromosome = 1 Strand = negative Connectron Object Number = 112

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 gtcaggaaat tactttcttca ttaccacctg ttaccactac aaaaacgagc gaacaaacca 120
 ctttggttac cgtgacatcc tgcgaatctc atgtgtgcac tgaatc 166

<210> 4
 <211> 37
 <212> DNA
 <213> Escherichia coli k-12 MG1655 complete genome

<220>
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 <222> (4626130)..(4626166)
 <223> Chromosome = 1 Strand = positive Connectron Object Number = 4651a

<400> 4
 tctgatgaca aacgccaaac tgcctgatgc gctacgc 37

<210> 5
 <211> 54
 <212> DNA
 <213> Escherichia coli k12 MG1655 complete genome

<220>
 <221> misc_feature
 <222> (705150)..(705203)
 <223> Chromosome = 1 Strand = negative Connectron Object Number = 811a

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<210> 6
 <211> 36
 <212> DNA
 <213> Escherichia coli k12 MG1655 complete genome

<220>
 <221> misc_feature
 <222> (757718)..(757753)
 <223> Chromosome = 1 Strand = negative Connectron Object Number = 975

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<400> 6
ttacgcctga tgcgctgcgc ttatcaggcc tacggg 36

<210> 7
<211> 37
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<220>
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<223> Chromosome = 1 Strand = positive Connectron Object Number = 4651a

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<210> 8
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<212> DNA
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<220>
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<223> Chromosome = 1 Strand = negative Connectron Object Number = 809

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<212> DNA
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<210> 10
<211> 16
<212> DNA
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<220>
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<210> 11
<211> 16
<212> DNA
<213> Saccharomyces cerevisiae complete genome - problem

<220>
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<223> Chromosome = 2 Strand = positive Connectron Object Number = 793

<400> 11
tattgcatgc tggatg 16

<210> 12
<211> 539
<212> DNA
<213> Saccharomyces cerevisiae complete genome - problem

<220>
<221> misc_feature
<222> (448454)..(448992)
<223> Chromosome = 5 Strand = positive Connectron Object Number = 4749

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gcatctagga agtaaccttg tacgaaaata ggcaatattt cctgttttagg cgattgtgac 120
gcagatttta gtccaacgat ctagcgtcaa ggaatttttt tatagtggga cattgcacca 180
aggaagtaac ttgatacgtc gtgggtgaat gggctctgttt tcttattcgg cggggtaata 240
cattttttggg ggaagtttgt ctgtctgacg cgccatatgt aggtacgcca aaaagggtctc 300
ctctacttcg aagcgcgagg tcgtatacct aataaggaaa tgtaatttat aactttttat 360
tatattggtc ttttcgagag cggaacgtag gtccatgttt aaagtatcca agagaatatc 420
cacgaagcgg ctgagcaacg aacagaatcc tggttctcct cgactaagca gatagttaag 480
atactgtgca ccatggaaat tgaaaacgaa agtacgtacc gactacttta tttttgcag 539

<210> 13
<211> 158
<212> DNA
<213> Saccharomyces cerevisiae complete genome - problem

<220>
<221> misc_feature
<222> (24863)..(25028)
<223> Chromosome = 5 Strand = negative Connectron Object Number = 4824a

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<400> 13
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 gcatctagga agtaaccttg tacgaaaata ggcaatattt cctgttttagg cgattgtgac 120
 gcagatttta gtccaacgat ctacggtcaa ggaatttt 158

<210> 14
 <211> 134
 <212> DNA
 <213> Halobacterium sp. NRC-1 complete genome

<220>
 <221> misc_feature
 <222> (732401)..(732534)
 <223> Chromosome = 1 Strand = positive Connectron Object Number = 6612

<400> 14
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 gcgatggtgc tggtcgccgc gatcgccgcc ggcgtcctca tcaacactgc cggctacctc 120
 caatccaagg ggtc 134

<210> 15
 <211> 193
 <212> DNA
 <213> Halobacterium sp. NAC-1 complete genome

<220>
 <221> misc_feature
 <222> (733018)..(733209)
 <223> Chromosome = 1 Strand = positive Connectron Object Number = 6644a

<400> 15
 gacgagcgcg gtcaagtggg gatcggcaca ctcatcgtgt tcacgcgat ggtgctggtc 60
 gccgcgatcg ccgccggcgt cctcatcaac accgccggt acctccaatc caaggggtcg 120
 gcaaccggtg aggaagcctc cgcacaggtc tccaaccgca tcaacatcgt ctccgcgtac 180
 ggcaacgtca aca 193

<210> 16
 <211> 85
 <212> DNA
 <213> Halobacterium sp. NAC-1 complete genome

<220>
 <221> misc_feature
 <222> (773399)..(773483)
 <223> Chromosome = 1 Strand = positive Connectron Object Number = 6852

<400> 16

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gtggggatcg gcacgctcat cgtgttcacg gcgatggtgc tggtcgccgc gatcgccgcc	60
ggcgtcctca tcaacactgc cggct	85

<210> 17
 <211> 121
 <212> DNA
 <213> Pseudomonas aeruginosa PA01, complete genome

<220>
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 <222> (4832718)..(4832838)
 <223> Chromosome = 1 Strand = positive Connectron Object Number = 53464

<400> 17 gccaacatcg aggccctcaa cagccgcacg gtgaacatcg gccagatcct cgaagtgatc	60
aagggcatct ccgagcagac caacctgctc gccctcaacg ccgccatcga agccgcgcgc	120
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<210> 18
 <211> 194
 <212> DNA
 <213> Pseudomonas aeruginosa PA01, complete genome

<220>
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 <222> (4836528)..(4836720)
 <223> Chromosome = 1 Strand = positive Connectron Object Number = 53531

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cagcgcctcc tgcgccaaca tcgaggccct caacagccgc acggtgaaca tcggccagat	120
cctcgaagtg atcaagggca tctccgagca gaccaacctg ctcgccctca acgccgccat	180
cgaagccgcg cgcg	194

<210> 19
 <211> 169
 <212> DNA
 <213> Pseudomonas aeruginosa PA01, complete genome

<220>
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 <222> (4838678)..(4838846)
 <223> Chromosome = 1 Strand = positive Connectron Object Number = 53549a

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gccctcaaca gccgcacggt gaacatcggc cagatcctcg aagtgatcaa gggcatctcc	120

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gagcagacca acctgctcgc cctcaacgcc gccatcgaag ccgcgcgcg 169

<210> 20
 <211> 36
 <212> DNA
 <213> Sequence Recognized by Synthetic DNA Binding Protein

<400> 20
 tcccatgag catagatatg caggtaggcg gcaagt 36

<210> 21
 <211> 136
 <212> DNA
 <213> Vibrio cholerae chromosome I, complete chromosome

<220>
 <221> misc_feature
 <222> (952641)..(952777)
 <223> Chromosome = 1 Strand = negative Connectron Object Number = 607

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 catagataga ctatgtgatt ggggtgaacg aacgtagcca acaccgctgc agcttcaagt 120
 aggaagggtta tacctt 136

<210> 22
 <211> 117
 <212> DNA
 <213> Vibrio cholerae chromosome I, complete chromosome

<220>
 <221> misc_feature
 <222> (1005810)..(1005926)
 <223> Chromosome = 1 Strand = negative Connectron Object Number = 646

<400> 22
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 cagactatgt gattggggtg aacgaacgta gccaataccg ctgcagcttc aagtagg 117

<210> 23
 <211> 36
 <212> DNA
 <213> Sequence Recognized by Synthetic PNA

<400> 23
 tcccatgag catagatatg caggtaggcg gcaagt 36

<210> 24
 <211> 136
 <212> DNA
 <213> Vibrio cholerae chromosome I, complete chromosome

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<220>
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aggaagggta tacctt                                     136

<210> 25
<211> 117
<212> DNA
<213> Vibrio cholerae chromosome I, complete chromosome

<220>
<221> misc_feature
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<223> Chromosome = 1 Strand = negative Connectron Object Number = 646

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cagactatgt gattgggggtg aacgaacgta gccaataccg ctgcagcttc aagtagg      117

<210> 26
<211> 15
<212> DNA
<213> Sequence Recognized by Synthetic Linked Pair of DNA Binding Objects

<400> 26
cccgacaaa cctgc                                     15

<210> 27
<211> 15
<212> DNA
<213> Sequence Recognized by Synthetic Linked Pair of DNA Binding Objects

<400> 27
cccggggttc ccgag                                     15

<210> 28
<211> 64
<212> DNA
<213> Aeropyrum pernix k1 complete genome

<220>
<221> misc_feature
<222> (284008)..(284070)
<223> Chromosome = 1 Strand = negative Connectron Object Number = 218

<400> 28
cccagccgtg cccgacaaa cctgccataa tttgttacat gaaggcacgg tttgggtgaa      60

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cggc

<210> 29
 <211> 163
 <212> DNA
 <213> Aeropyrum pernix k1 complete genome

<220>
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 <223> Chromosome = 1 Strand = negative Connectron Object Number = 295

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 catgaaggca cggtttgggt gaacggctca taatcctctc gat 163

<210> 30
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 <212> DNA
 <213> Synthetic Sequence

<400> 30
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<210> 31
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<400> 31
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<210> 32
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 <212> RNA
 <213> Synthetic Sequence

<400> 32
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<210> 33
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<400> 33
 gugguacucc ucua 14

<210> 34
 <211> 14
 <212> RNA
 <213> Synthetic Sequence

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<400> 34
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14